What is claimed is:

1. A system for controlling sensor motion during a measurement, comprising:

   a. a drilling assembly in a wellbore, said drilling assembly having a drill bit at one end and engaged with a drilling tubular at an opposite end thereof;

   b. a first sensor disposed in said drilling assembly for making a measurement of a formation parameter of interest; and

   c. a substantially non-rotating stabilizer disposed in said drilling assembly proximate said first sensor, said substantially non-rotating stabilizer adapted to reduce motion of said first sensor below a predetermined level during said measurement.

2. The system of claim 1, wherein the first sensor comprises an NMR sensor.

3. The system of claim 1, further comprising a second sensor for detecting motion of the drilling assembly proximate the first sensor.

4. The system of claim 3, wherein the second sensor comprises an accelerometer.

5. The system of claim 3, wherein the second sensor comprises three mutually orthogonal accelerometers.

6. The system of claim 1, wherein the wellbore comprises a deviated wellbore.

7. The system of claim 1, wherein the non-rotating stabilizer comprises:

i. a housing attached to said drilling assembly;

ii. a sleeve substantially surrounding at least a portion of said housing;

iii. a bearing acting cooperatively with said sleeve and said housing for allowing relative motion between the sleeve and the housing; and

iv. a rib attached to said housing, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level.

8. The system of claim 1, wherein the predetermined level is 2.0 millimeter.

9. The system of claim 7, wherein the rib is a straight rib.

10. The system of claim 7, wherein the rib is a spiral rib.

11. The system of claim 7, wherein the rib is an adjustable rib, said adjustable rib adapted to be controllably extended to contact a borehole wall.

12. The system of claim 7, wherein the rib is an adjustable rib adapted to be controllably extended to contact a borehole wall and further comprising a downhole controller and a second sensor for detecting motion of the drilling assembly proximate

the first sensor, said controller controlling the adjustable rib to reduce motion detected by said second sensor below a predetermined level.

13. The system of claim 7, wherein the housing is adapted to displace the center of the non-rotating stabilizer relative to a longitudinal axis of the drilling assembly.

14. The system of claim 1, wherein the non-rotating stabilizer comprises two non-rotating stabilizers, with one non-rotating stabilizer being deployed on each side of said first sensor.

15. The system of claim 1, wherein the first sensor comprises at least one of (i) a density sensor and (ii) a porosity sensor.

16. A method for controlling sensor motion during a measurement, comprising:

a. extending a drilling tubular in a wellbore to a downhole location, said drilling tubular engaged with a drilling assembly having a drill bit at a bottom end thereof;

b. using a first sensor disposed in said drilling assembly for making a measurement of a formation parameter of interest; and

c. attaching a non-rotating stabilizer in said drilling assembly proximate said first sensor, said non-rotating stabilizer adapted to reduce motion of said first sensor below a predetermined level during said measurement.

17. The method of claim 16, wherein the first sensor comprises an NMR sensor.

18. The method of claim 16, further comprising using a second sensor disposed in said drilling assembly for detecting motion of the drilling assembly proximate the first sensor.

19. The method of claim 18, wherein the second sensor comprises an accelerometer.

20. The method of claim 18, wherein the second sensor comprises three mutually orthogonal accelerometers.

21. The method of claim 16, wherein the wellbore comprises a deviated wellbore.

22. The method of claim 16, wherein the non-rotating stabilizer comprises:

i. a housing adapted to attach to said drilling assembly;

ii. a sleeve substantially surrounding at least a portion of said housing;

iii. a bearing acting cooperatively with said sleeve and said housing for allowing relative motion between the sleeve and the housing; and

iv. a rib attached to said housing, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level.

23. The system of claim 16, wherein the predetermined level is 2.0 millimeter.

24. The method of claim 22, wherein the rib is a straight rib.

25. The method of claim 22, wherein the rib is a spiral rib.

26. The method of claim 22, wherein the rib is an adjustable rib, said adjustable rib adapted to be controllably extended to contact a borehole wall.

27. The method of claim 16, wherein the housing is adapted to displace the center of the non-rotating stabilizer relative to a longitudinal axis of the drilling assembly.

28. The method of claim 16, wherein the non-rotating stabilizer comprises two non-rotating stabilizers, with one non-rotating stabilizer being deployed on each side of said first sensor.

29. The method of claim 16, wherein the first sensor comprises at least one of (i) a density sensor and (ii) a porosity sensor.

30. The method of claim 22, wherein the rib is an adjustable rib adapted to be controllably extended to contact a borehole wall and further comprising a downhole

controller and a second sensor for detecting motion of the drilling assembly proximate the first sensor, said controller controlling the adjustable rib to reduce motion detected by said second sensor below a predetermined level.

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